

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Office Action dated October 28, 2003 (U.S. Patent Office Paper No. 7). In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

As outlined above, claims 6, 12, 14, and 17 are being amended to correct formal errors and to more particularly point out and distinctly claim the subject invention. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

Formal Objections or Rejections

Claim 6 was objected to due to a minor informality. Applicants respectfully submit that they have amended claim 6 and the minor informality has been corrected.

Prior Art Rejections

Claims 1, 6 to 11, 13 and 16 were rejected under 35 U.S.C. §102(e) as being anticipated by Miyamoto *et al.*, U.S. Patent No. 6,492,719 (further, Miyamoto '719).

Applicants respectfully disagree with the rejection and submit that claim 1 recites a semiconductor device comprising a first input/output interface circuit adapted to a serial bus, an internal circuit for performing a circuit operation corresponding to a signal which is inputted or outputted through said first input/output interface circuit between said internal circuit and said serial bus, a non-volatile storage circuit for storing identification data, a comparator circuit for comparing internal identification data stored in said non-volatile storage circuit with external identification data included in an input signal supplied through said serial bus and a control circuit responsive to an input signal subsequently supplied through said serial bus when said comparator circuit generates a match detecting signal for performing a circuit operation corresponding to said input signal.

The present invention is directed to a semiconductor device comprising a non-volatile storage circuit for storing identification data and a comparator circuit for comparing the identification data. The identification data of a device is the address data of the device. Without address data about a device it is impossible to access the target device. For example,

on a serial bus to which a plurality of devices of the same type are connected it is difficult to identify to which device the command is transmitted without the address data of the device.

The Examiner alleges in the Office Action on page 2 that the disclosure of Figs. 1, 7 and 8 and of cols. 10, 12 and 15 to 55 from Miyamoto '719 anticipates the recitation of claim 1. Applicants respectfully disagree and submit after careful review of the reference that Miyamoto '719 discloses a general memory included in a microcomputer that incorporates as shown in FIG. 7 by way of example, a chip MF that comprises a processor CPU, a flash memory Flash, a random access memory/cache memory RAM/Cache, a data transfer controller DTC, a direct memory access controller DMAC, a bus state controller BSC, a user break controller UBC, an interrupt controller INTC, a serial communication interface SCI, a multi-function timer pulse unit MTU, a compare match timer CMT, an A/D converter A/D, a watchdog timer WDT, and a phase-locked loop circuit PLL.

Applicants respectfully contend that the Miyamoto '719 disclosure refers only to a general type of memory, such as Flash and DMAC. Further, the memory device disclosed by Miyamoto '719 can be accessed for the first time by selecting the memory device. It is not possible to access the target memory before the device is selected. The Miyamoto '719 memory has to have a channel select signal and the chip select signal for selecting the target device. The memory disclosed by Miyamoto '719 can not be used in a microcomputer with the purpose of storing and comparing the identification data of the device.

Based on the observations made above and on a careful review of Miyamoto '719 Applicants respectfully contend that the non-volatile storage circuit for storing identification data, the comparator and implicitly the function of comparing the data recited by the claims for the present invention are not disclosed, taught or suggested by Miyamoto '719. Therefore Applicants respectfully submit that Miyamoto does not identically disclose, teach or suggest all the features of claim 1 as currently recited. Applicants respectfully ask the Examiner to withdraw the rejection regarding claim 1.

Claims 2 to 5 and 6 to 11 depend from and add features to allowable claim 1. Therefore they are also allowable at least for reasons discussed above in connection with claim 1.

Claims 2, 4 and 5 were rejected under 35 U.S.C. §103(a) as being unpatentable based on Miyamoto *et al.*, U.S. Patent No. 6,492,719 (further, Miyamoto '719).

Claim 3 was rejected under 35 U.S.C. §103(a) as being unpatentable over Miyamoto *et al.*, U.S. Patent No. 6,492,719 (further, Miyamoto '719) in view of Lin, U.S. Patent No. 6,184,724.

As mentioned above, Applicants respectfully submit that claims 2 to 5 and 6 to 11 depend from and add features to allowable claim 1. Therefore they are also allowable at least for reasons discussed above in connection with claim 1.

Other matters

Applicants thank the Examiner for indicating the allowability of claims 12, 14, 15, 17 and 18 if rewritten in independent form. Applicants amended claims 12, 14, and 17 to put them in condition for allowance, while maintaining claims 15 and 18 as dependent claims from allowable independent claims 14 and 17, respectively. Claims 15 and 18 are also allowable because they depend from and add features to allowable independent claims.

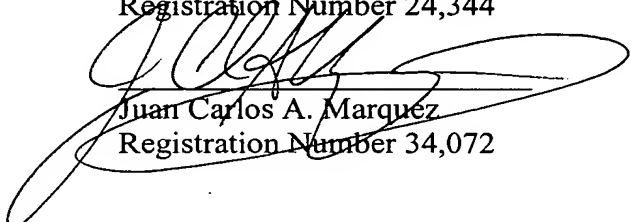
Conclusion

In view of all the above, Applicants respectfully submit that certain clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejections in the Office Action rely. These differences are more than sufficient that the present invention as now claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicant's undersigned representative at the address and phone number indicated below.

Respectfully submitted,

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